**Rajasthan Institute of Engineering & Technology, Jaipur.**

**II Mid Term examination**

 **Session: 2017-18 Set-A**

**VIII Semester & CIVIL Branch**

**Subject: - WRE-II**

**Code: - 8CE1A**

Time: 2 hrs. M.M.:20

Q.1 Describe main components of hydroelectric scheme?

 **OR**

Q.1 Describe the classification of spillway with sketches?

Q.2 Describe the factors affecting required spillway capacity?

 **OR**

Q.2 Describe and sketch Siphon spillway in detail?

Q.3 Describe the environmental impact assessment of water resource projects?

 **OR**

Q.3 Describe the role of GIS in water resource engineering?

 **OR**

Q.4 Design a Sarda type fall for a canal and draw neat sketch for the following data:

 (a) Discharge $\frac{U/S}{D/S}$ = $\frac{12 cumecs}{12 cumecs}$ (b) Full supply level $\frac{U/S}{D/S}$ = $\frac{201.5}{200.0}$ (c) Drop= 1.25 m

 (d) Bed level $\frac{U/S}{D/S}$ = $\frac{200.0}{198.75}$ (e) Bed width $\frac{U/S}{D/S}$ = $\frac{9.0 m}{9.0 m}$ (f) Full supply depth $\frac{U/S}{D/S}$ = $\frac{1.50 m}{1.50 m}$

 (g) Bligh’s creep coefficient= 10

  **OR**

**Q.4** Write the equations for uplift pressure in the case of intermediate and upstream piles of a water resource structure by Khosla’s theory?